

FIG. 1A
(PRIOR ART)

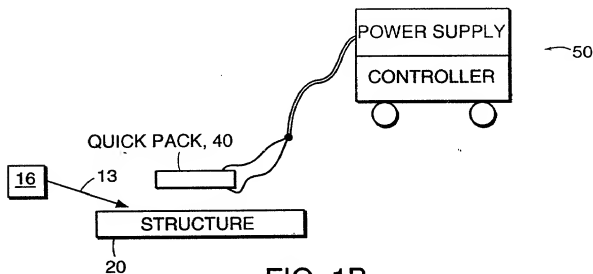


FIG. 1B

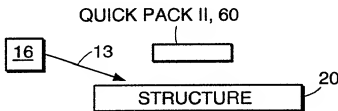


FIG. 1C

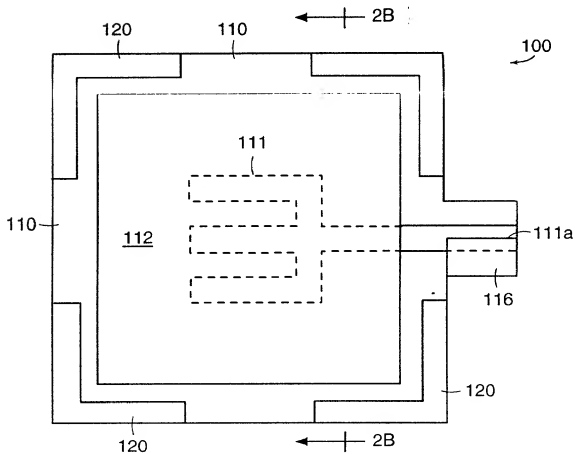


FIG. 2A

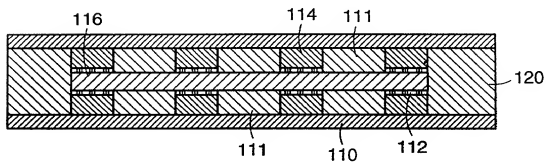


FIG. 2B

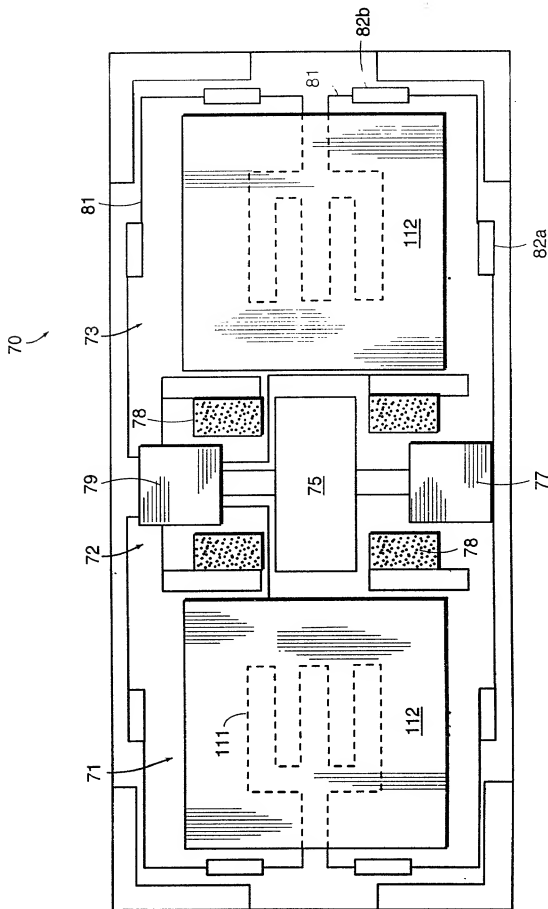


FIG. 2C

106020 02200000

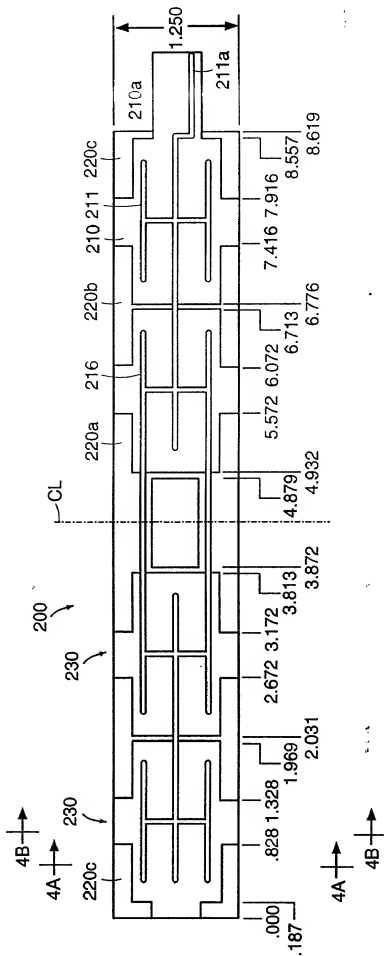


FIG. 3

106090-02E09960

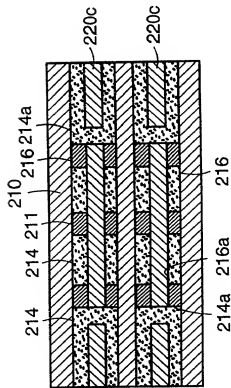


FIG. 4A

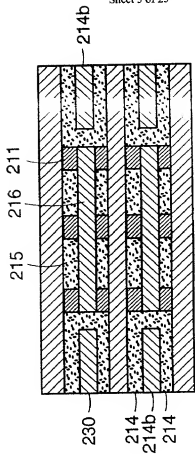
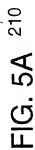


FIG. 4B



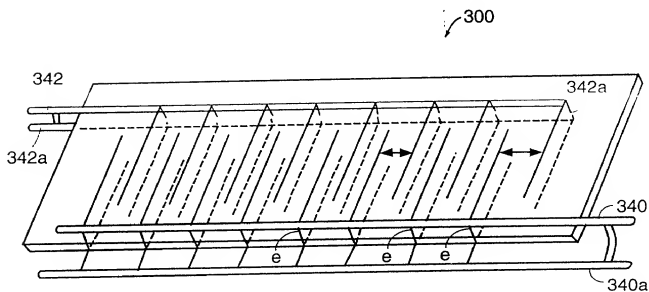


FIG. 6

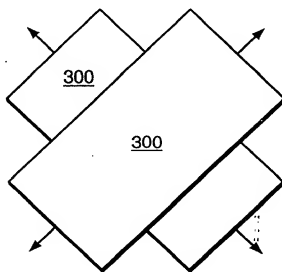


FIG. 7

FIG. 6

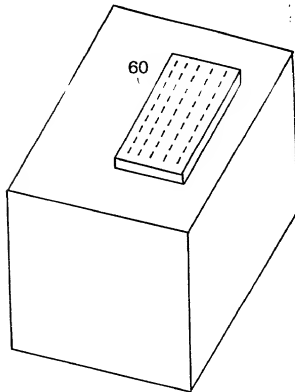


FIG. 8A

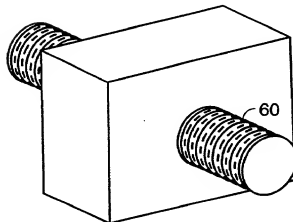
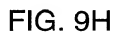
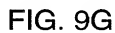
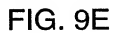
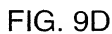
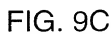


FIG. 8B



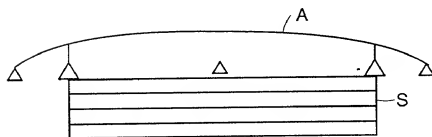


FIG. 9P

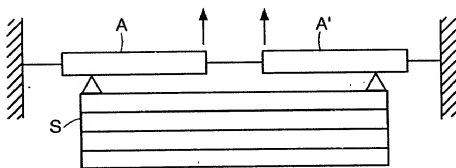


FIG. 9Q

FIG. 9P

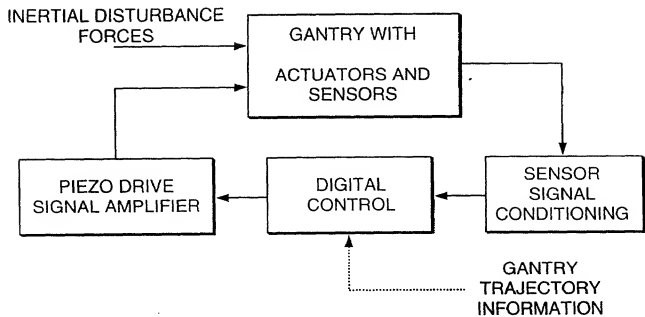


FIG. 10

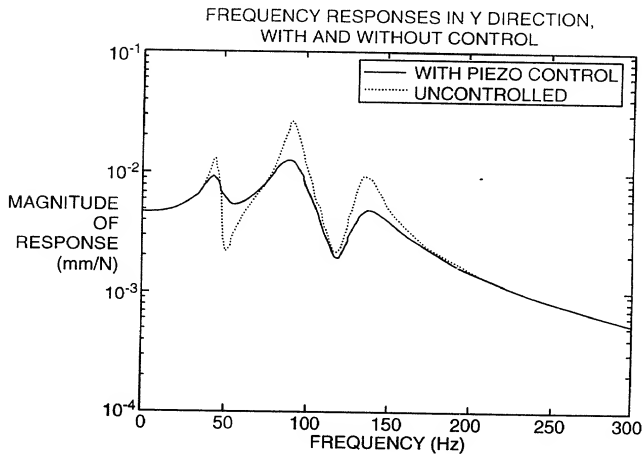


FIG. 11

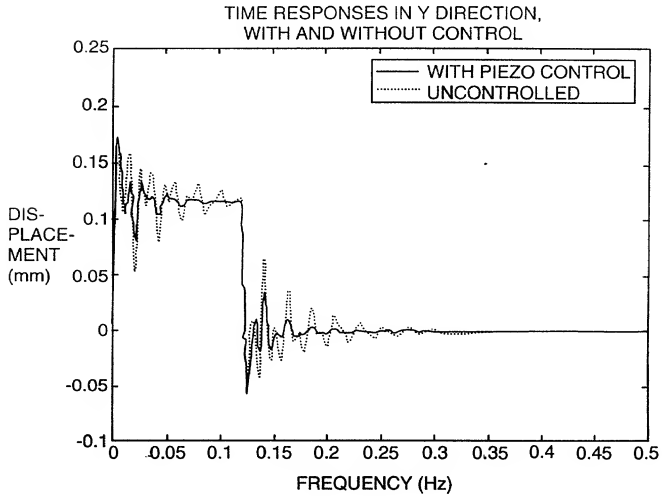


FIG. 12

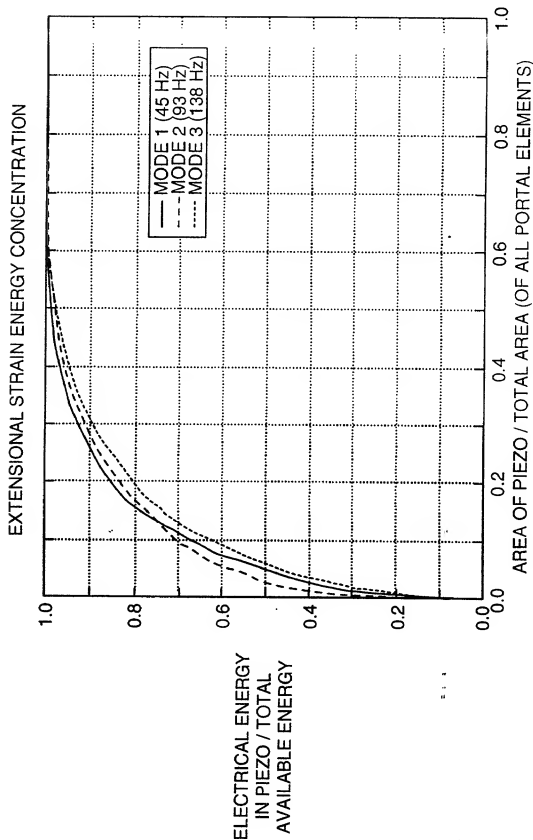


FIG. 13

ELECTRICAL ENERGY
 IN PIEZO / TOTAL
 AVAILABLE ENERGY

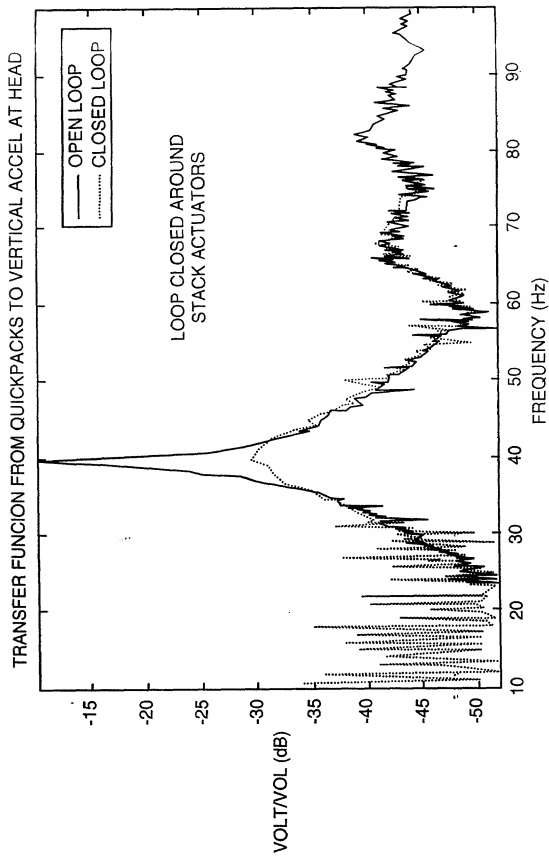


FIG. 14

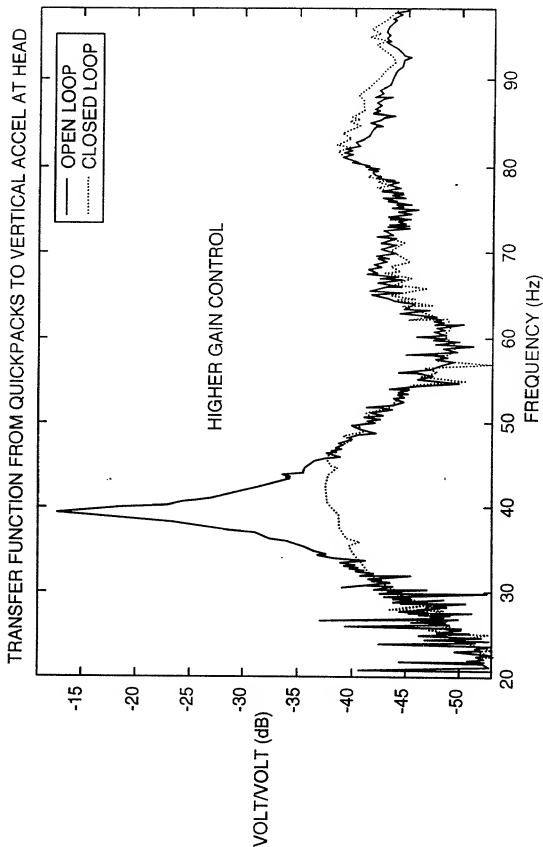
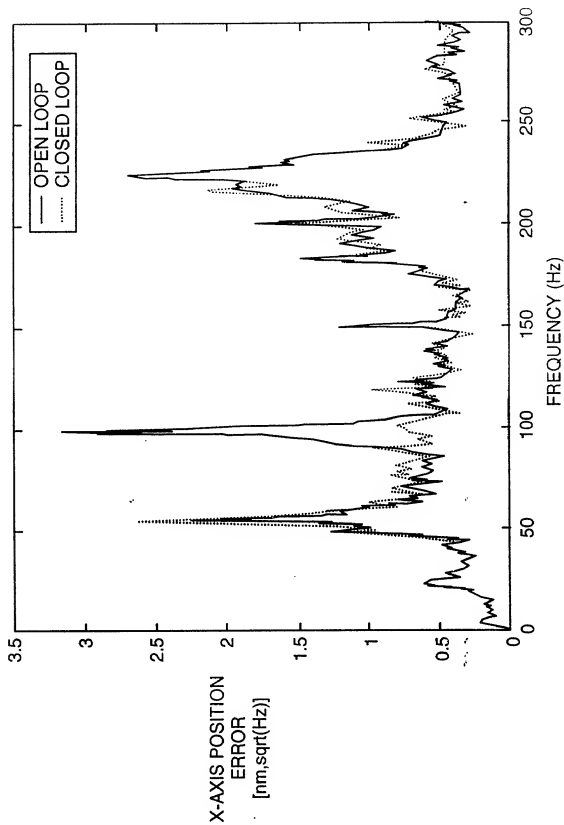
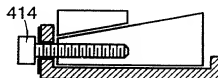


FIG. 15





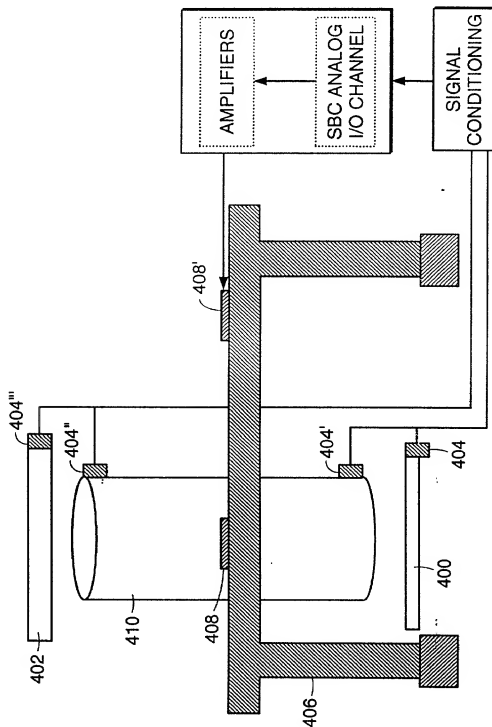
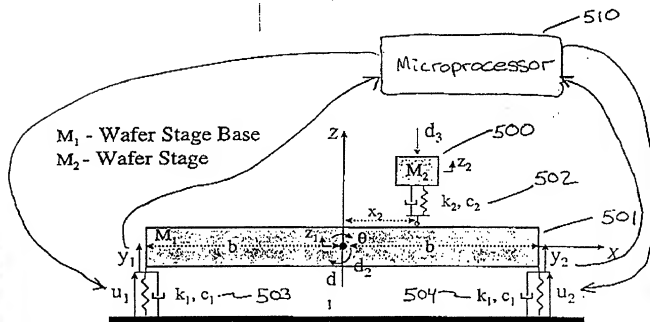


FIG. 21

106023* 02220960



- Inputs (u_i): Voice Coil forces on base in Z
- Outputs (y_i): Laser displacement measurements collocated with voice coil inputs
- Disturbances (d_i): Z-force and θ moment on base, Z force on stage

FIG. 22

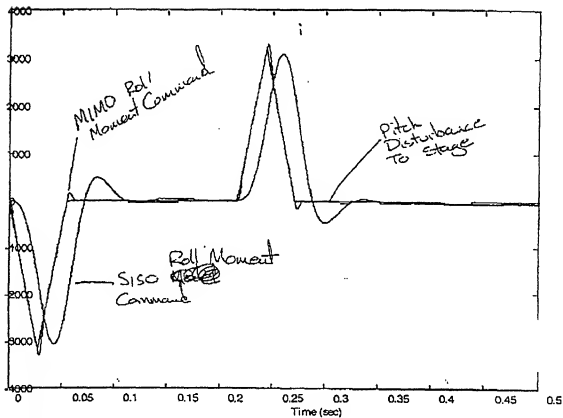


FIG. 23

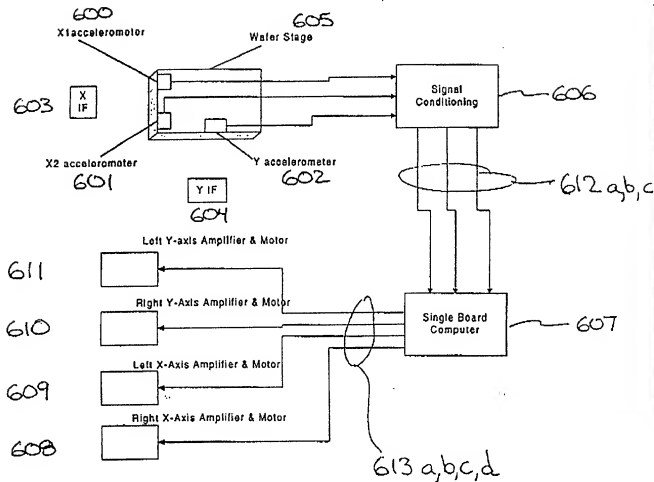


FIG. 24

FIG. 25

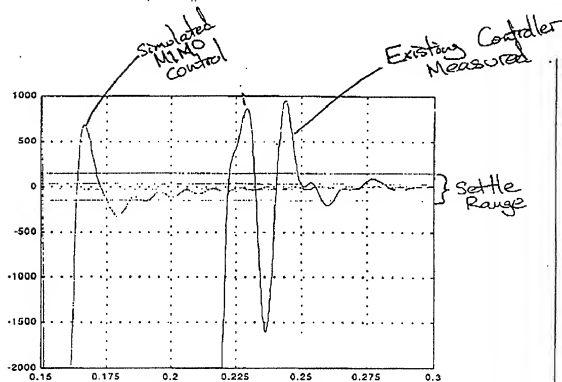


FIG. 26

00003320, 030901